

Application No.: 10/666,331  
Preliminary Amendment  
Attorney Docket No.: LMRX-P023/P1130  
Page 2

RECEIVED  
CENTRAL FAX CENTER  
DEC 07 2006

### Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims

1. (Original) In a plasma processing system, a method of removing a set of particles from a set of structures including yttrium oxide, comprising:
  - exposing said set of structures to a first solution including an oxidizer for a first period;
  - removing said set of structures from said first solution;
  - exposing said set of structures to a second solution including a krypton reagent for a second period;
  - removing said set of structures from said second solution; and
  - mechanically rubbing a surface of said set of structures with a third solution including a first set of acids for a third period.
2. (Previously presented) The method of claim 1, further including the steps of:
  - exposing said set of structures to a fourth solution including a second set of acids for a fourth period; and
  - exposing said set of structures to a fifth solution including a first set of alkalines for a fifth period.
3. (Currently amended) The method of claim 1, wherein said step of exposing said set of structures in ~~to~~ said first solution for a first period further includes mechanically rubbing said set of structures with an abrasive pad.
4. (Original) The method of claim 2, wherein said step of removing said set of structures from said first solution further includes rinsing said set of structures with de-ionized water.
5. (Original) The method of claim 4, further including drying said set of structures with a filtered inert gas.

Application No.: 10/666,331  
Preliminary Amendment  
Attorney Docket No.: LMRX-P023/P1130  
Page 3

6. (Original) The method of claim 5, wherein said filtered inert gas comprises nitrogen.
7. (Withdrawn) The method of claim 2, wherein said step of exposing said set of structures to said second solution for a second period further includes cleaning said set of structures ultrasonically.
8. (Withdrawn) The method of claim 2, wherein after said step of exposing said set of structures in said second solution for a second period, said set of structures are rinsed and mechanically rubbed with an alcohol.
9. (Original) The method of claim 2, wherein said step of removing said set of structures from said second solution further includes rinsing said set of structures with de-ionized water.
10. (Original) The method of claim 9, further including drying said set of structures with a filtered inert gas.
11. (Original) The method of claim 10, wherein said filtered inert gas comprises nitrogen.
12. (Original) The method of claim 11, wherein said step of removing said set of structures from said third solution further includes rinsing said set of structures with de-ionized water.
13. (Original) The method of claim 12, further including drying said set of structures with a filtered inert gas.
14. (Original) The method of claim 13, wherein said filtered inert gas comprises nitrogen.

Application No.: 10/666,331  
Preliminary Amendment  
Attorney Docket No.: LMRX-P023/P1130  
Page 4

15. (Original) The method of claim 2, wherein said step of removing said set of structures from said forth solution further includes rinsing said set of structures with de-ionized water.
16. (Original) The method of claim 15, further including drying said set of structures with a filtered inert gas.
17. (Original) The method of claim 16, wherein said filtered inert gas comprises nitrogen.
18. (Currently amended) The method of claim ~~14~~ 15, wherein said step of removing said set of structures from said fifth solution further includes rinsing said set of structures with de-ionized water.
19. (Original) The method of claim 15, further including drying said set of structures with a filtered inert gas.
20. (Original) The method of claim 16, wherein said filtered inert gas comprises nitrogen.
21. (Withdrawn) The method of claim 2, wherein said oxidizer comprises H<sub>2</sub>O<sub>2</sub>.
22. (Withdrawn) The method of claim 2, wherein said second solution comprises H<sub>2</sub>O<sub>2</sub>.
23. (Withdrawn) The method of claim 22, wherein said H<sub>2</sub>O<sub>2</sub> comprises from about 10% to about 30% of said second solution.
24. (Withdrawn) The method of claim 22, wherein said H<sub>2</sub>O<sub>2</sub> comprises from about 20% to about 30% of said second solution.

Application No.: 10/666,331  
Preliminary Amendment  
Attorney Docket No.: LMRX-P023/P1130  
Page 5

25. (Withdrawn) The method of claim 22, wherein said  $\text{H}_2\text{O}_2$  comprises about 30% of said second solution.

26. (Original) The method of claim 2, wherein said first period comprises 30 minutes.

27. (Original) The method of claim 2, wherein said ketone reagent comprises acetone.

28. (Original) The method of claim 2, wherein said second period comprises 5 minutes.

29. (Withdrawn) The method of claim 2, wherein said third solution comprises  $\text{H}_2\text{O}_2$ .

30. (Withdrawn) The method of claim 2, wherein said first set of acids comprises HF.

31. (Withdrawn) The method of claim 30, wherein said HF comprises from about 2% to about 33% of said third solution.

32. (Withdrawn) The method of claim 30, wherein said HF comprises from about 2% to about 25% of said third solution.

33. (Withdrawn) The method of claim 30, wherein said HF comprises of about 2% of said third solution.

34. (Withdrawn) The method of claim 2, wherein said first set of acids comprises  $\text{HNO}_3$ .

Application No.: 10/666,331  
Preliminary Amendment  
Attorney Docket No.: LMRX-P023/P1130  
Page 6

35. (Withdrawn) The method of claim 34, wherein said  $\text{HNO}_3$  comprises from about 2% to about 33% of said third solution.
36. (Withdrawn) The method of claim 34, wherein said  $\text{HF}$   $\text{HNO}_3$  comprises from about 2% to about 25% of said third solution.
37. (Withdrawn) The method of claim 34, wherein said  $\text{HF}$   $\text{HNO}_3$  comprises of about 2% of said third solution.
38. (Original) The method of claim 2, wherein said third period comprises 1 minute.
39. (Previously Presented) The method of claim 2, wherein said fourth solution comprises  $\text{H}_2\text{O}$ .
40. (Original) The method of claim 2, wherein said second set of acids comprises  $\text{CH}_3\text{COOH}$ .
41. (Previously Presented) The method of claim 40, wherein said  $\text{CH}_3\text{COOH}$  comprises from about 2% to about 10% of said fourth solution.
42. (Previously Presented) The method of claim 40, wherein said  $\text{CH}_3\text{COOH}$  comprises from about 2% to about 6% of said fourth solution.
43. (Previously Presented) The method of claim 40, wherein said  $\text{CH}_3\text{COOH}$  comprises of about 4% to about 5% of said fourth solution.
44. (Previously Presented) The method of claim 2, wherein said fourth period is about 10 minutes.
45. (Withdrawn) The method of claim 2, wherein said fourth solution comprises  $\text{H}_2\text{O}_2$ .

Application No.: 10/666,331  
Preliminary Amendment  
Attorney Docket No.: LMRX-P023/P1130  
Page 7

46. (Original) The method of claim 2, wherein said first set of alkalines comprises  $\text{NH}_4\text{OH}$ .
47. (Original) The method of claim 46, wherein said  $\text{NH}_4\text{OH}$  comprises from about 8% to about 33% of said fifth solution.
48. (Original) The method of claim 46, wherein said  $\text{NH}_4\text{OH}$  comprises from about 6% to about 33% of said fifth solution.
49. (Original) The method of claim 46, wherein said  $\text{NH}_4\text{OH}$  comprises of about 25% of said fifth solution.
50. (Original) The method of claim 2, wherein said forth solution comprises  $\text{H}_2\text{O}_2$ .
51. (Original) The method of claim 50, wherein said  $\text{H}_2\text{O}_2$  comprises from about 8% to about 33% of said fifth solution.
52. (Original) The method of claim 50, wherein said  $\text{H}_2\text{O}_2$  comprises from about 6% to about 33% of said fifth solution.
53. (Original) The method of claim 50, wherein said  $\text{H}_2\text{O}_2$  comprises of about 25% of said fifth solution.
54. (Previously Presented) The method of claim 2, wherein said fifth period is about 10 minutes.
55. (Withdrawn) In a plasma processing system, a method of removing a set of particles from a set of structures including yttrium oxide, comprising:  
    exposing said set of structures to a first solution including a ketone reagent for a first period;  
    removing said set of structures from said first solution;

Application No.: 10/666,331  
Preliminary Amendment  
Attorney Docket No.: LMRX-P023/P1130  
Page 8

exposing said set of structures to a second solution including an oxidizer for a second period;

removing said set of structures from said second solution; and

mechanically rubbing a surface of said set of structures with a third solution including a first set of acids for a third period.

56. (Withdrawn) The method of claim 55, further including the steps of:

exposing said set of structures to a fourth solution including a second set of acids for a fourth period; and

exposing said set of structures to a fifth solution including a first set of alkalines for a fifth period.

57. (Withdrawn) In a plasma processing system, a method of removing a set of particles from a set of structures including yttrium oxide, comprising:

exposing said set of structures to a first solution including an oxidizer for a first period;

exposing said set of structures to a second solution including a first set of alkalines with said oxidizer for a second period;

removing said set of structures from said second solution; and

mechanically rubbing a surface of said set of structures with said third solution including a first set of acids for a third period.

58. (Withdrawn) The method of claim 57, further including the step of exposing said set of structures to a solution including a second set of acids for a fourth period.